

A fully-closed, zero discharging, and clean oxidizing pulping process, and its method of preparation, are disclosed. The process employs active oxygen free radicals generated by electron reduction reaction of molecular oxygen in an ion reactor to transform and separate lignin, to change chromophoric groups in the intercellular space, and to obtain paper pulp. Conventional pulping technologies which use harmful polluting chemicals, such as acid, alkaline, chlorine, anthraquinone and so on, are basically changed in the present invention. The cooking and bleaching processes, which generate severe pollution, can be avoided. Abundant annually grown fiber materials can be utilized in this process, and water and energy can be saved. The present invention can reduce production cost and have excellent social, economic and environmental benefits.